

# Saeid Haghighatshoar



## About me

I always consider myself an engineer. I like to work in both theory & practice. My joy is to find new solutions for various R&D problems, use simulations to check their efficiency, and finally implement them as software packages. I change my field from time to time to learn new things. I have a passion for programming languages and keep learning new ones in my free time.

## Personal Info

**Permit: B for work**  
Marital status: Married  
Nationality: Iranian  
Birth date: 23.08.1985

## Areas of Specialization

Data Science & Machine learning • Neuromorphic technology • Statistical signal processing • Algorithm design & optimization • Radar & Wireless technology

## Daily Python Libraries

PyTorch • Numpy • Scipy  
• OpenCV • Rockpool • Scikit Learn • Matplotlib

## Patents

China   
US

## Publications

Google Scholar

## Web & Social Media

Personal Website   
LinkedIn   
☺ not active :

## Hobbies & Interests

Chess • Meditation  
• Boulderding • Cycling • No Gym • Long Walks

## Contact

haghighatshoar@gmail.com

## R&D HISTORY

2021–2023

### Senior Machine Learning Engineer

ZURICH • Switzerland

I am working as a senior machine learning engineer at the intersection of algorithms and hardware design team. I design novel training algorithms for low-power neuromorphic computation with spiking neural networks (new class of neural nets).



2020–2021

### Senior Machine Learning and Radar Engineer

NEUCHÂTEL • Switzerland

I worked as a machine learning engineer and helped to design a remote sensing system based on RF radars. Targeted applications: contactless vital signs monitoring (breath & heart rate), gesture recognition, behind-the-wall presence detection, people counting.



2018–2020

### Senior Machine Learning Researcher

BERLIN • Germany

I worked as a postdoctoral researcher and project manager on implementing machine learning tools for data processing in 5G and 6G wireless mobile communications systems.



2015–2018

### Postdoctoral Researcher

BERLIN • Germany

I worked as a researcher at CommIT (communication and information theory) group. I developed low-complexity algorithms for 5G and 6G wireless systems based on novel methods such as machine learning and compressed sensing.



## EDUCATION

2010–2014

### PhD in Computer & Communication Sciences

SWITZERLAND • EPFL



2007–2009

### MSc in Electrical Engineering (Communications Systems)

IRAN • Sharif University of Technology



2003–2007

### BSc in Electrical Engineering (Electronics)

IRAN • Sharif university of Technology



## LANGUAGES

Persian and Azari  
English  
German  
French

C2	mother tongue
C1	
B2	
A2	

## PROGRAMMING SKILLS

Python	
C/C++/Go/Nim/OCaml	
Rust/JS/Ruby	
Matlab/Bash/HTML	

## AWARDS AND RECOGNITION

2009 *Best Applied MSc Thesis Award*, Sharif University of Technology, Iran.  
2007 2-Year Research Fellowship for Outstanding Student in Electrical Engineering, Sharif University of Technology, Iran.  
2007 Ranked 1<sup>st</sup> in Electrical Engineering Olympiad, Tehran, Iran.  
2003 Ranked 25<sup>th</sup> in Nationwide University Entrance Exam among over 500,000 Participants, Tehran, Iran.

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